ABSTRACT OF THE DISCLOSURE

Methods for allocating connections between nodes in an optical ring communications network are provided. these methods, working path connections are assigned so combination required wavelengths and of that the in the network is (WICs) wavelength interface cards In one such method, the wavelengths for the minimized. working path connections are assigned so that lightpaths are connected around the ring to complete a circle. another method, components of lightpaths are connected so that a linked component group of lightpaths is formed around the ring until no more connectable lightpath connections are available or until a complete circle is formed around the ring.

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